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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/623,888	07/17/2003	Robert Gurny	4-20437D	7666
1095	7590 03/07/2006		EXAMINER	
NOVARTIS			KISHORE, GOLLAMUDI S	
CORPORAT	E INTELLECTUAL PROI	PERTY		
ONE HEALTH PLAZA 104/3			ART UNIT	PAPER NUMBER
EAST HANOVER, NJ 07936-1080			1615	

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
		10/623,888	GURNY ET AL.
	Office Action Summary	Examiner	Art Unit
		Gollamudi S. Kishore, Ph.D	1615
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cover sheet with the c	orrespondence address
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL CHEVER IS LONGER, FROM THE MAILING D nsions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. o period for reply is specified above, the maximum statutory period are to reply within the set or extended period for reply will, by statutal reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONEI	L. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status			
2a)	Since this application is in condition for allowa	s action is non-final. ance except for formal matters, pro	
	closed in accordance with the practice under	<i>Ex par</i> te <i>Quayle</i> , 1935 С.D. 11, 45	3 O.G. 213.
Dispositi	on of Claims		
5)□ 6)⊠ 7)□	Claim(s) 1,4-6 and 32-37 is/are pending in the 4a) Of the above claim(s) is/are withdra Claim(s) is/are allowed. Claim(s) 1,4-6 and 32-37 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	wn from consideration.	
Applicati	on Papers		
9) 10)	The specification is objected to by the Examine The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Example.	cepted or b) objected to by the E drawing(s) be held in abeyance. See ction is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).
Priority u	ınder 35 U.S.C. § 119		
12) <u></u> a)[Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureasee the attached detailed Office action for a list	ts have been received. ts have been received in Application ority documents have been receive u (PCT Rule 17.2(a)).	on No d in this National Stage
2) 🔲 Notica 3) 🔲 Inform	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	4) Interview Summary (Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	

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DETAILED ACTION

The RCE dated 11-17-05 is acknowledged.

Claims included in the prosecution are 1, 4-6 and 32-37.

Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 1, 4-6 and 32-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites 'active agent having low water solubility encapsulated in nanoparticles comprising solubilizing agent'. It is unclear what this solubilizer solubilizes.

It is unclear as to what applicant intends to convey by 'polyvinyl alcohol has a degree of hydrolysis greater than 70%' as recited in claim 33. What does an alcohol hydrolyze to? Instant specification does not explain this aspect.

Applicant's arguments have been fully considered, but are not persuasive.

Applicant argues that polyvinyl alcohol is produced by the hydrolysis of polyvinyl acetate and that the degree of hydrolysis of polyvinyl alcohol refers to varying levels of hydrolysis. This argument would have been persuasive if the compound recited is polyvinyl alcohol. However, instant claims recite polyvinyl alcohol and not polyvinyl

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acetate. That means the entire molecule is polyvinyl alcohol and therefore there is no degree of hydrolysis (100 % hydrolyzed from polyvinyl acetate).

Claim Rejections - 35 USC § 103

- 4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 5. Claims 1, 4-6 and 32-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allemann et al (international Journal of Pharmacology, 1992) of record by itself or in combination with Kawata (4,343,789) or Igari (5,482,706) or Kantor (4,895,725) by themselves or in combination.

Allemann et al disclose a process of preparation of polymeric nanodispersions containing water soluble polymer (polyvinyl alcohol) and Eudragit S (anionic polymer which is soluble from pH 7 upwards (abstract and

page 248). What is lacking in Allemann is the teaching of the use of these nanospheres for encapsulating water insoluble drugs. However, on page 253 Allemann teaches that these nanospheres are for sustained release dosage forms and therefore, it would have been prima facie obvious to one of ordinary skill in the art to use Allemann's nanosphere dispersions for the water insoluble drugs with a reasonable expectation of success.

As pointed out in the earlier action, Kawata et al disclose fine powders of active agents of low solubility coated with various copolymers of met acrylic acid and methacrylic esters or hydroxypropylmethyl cellulose

phthalates. The fine particles are mixed with additives and filled in capsules for oral delivery. The particles can be lyophilized. (Abstract, col. 2, lines 13-44, col. 5, lines 10-20, Examples and claims).

Igari teaches that drugs can be delivered orally using enteric-coated nanocapsule suspensions (col. 11, lines 59-61).

Kantor teaches that lipophilic compounds such as fish oils can be delivered orally by using enterically coated capsules. The lower limit of the capsules is 100 nm (Examples and claim 5).

One of ordinary skill in the art would be motivated to use Allemann et al's nanodispersons for the delivery of water insoluble drugs with a reasonable expectation of success since Kawata shows the feasibility of enteric delivery of water insoluble drugs using enteric formulations containing water insoluble drugs. One of ordinary skill in the art would be motivated to use the formulations of Allemann and containing water insoluble drugs orally since Igari and Kantor teach that suspensions of enterically coated nanocapsules can be administered orally.

Applicant's arguments have been fully considered, but are not found to be persuasive. Applicant argues that Allemann fails to disclose a preparation that incorporates an active agent and that a careful reading of page 233 is required.

According to applicant, Allemann specifically refers to an injectable sustained release

dosage form and that an injection is different from an oral dosage form. This argument is not persuasive. First of all, the examiner pointed out page 253 and not page 233. Secondly, instant claims are composition claims and intended use has no patentable significance and there is nothing in the reference, which precludes the administration of the nanospheres by oral administration. The very fact that one of the polymers taught by Allemann is Eudragit S is an enteric polymers implies that one can use the formulation by means other than injection since this polymer dissolves at pH 7 and upwards which is intestinal pH. The arguments by applicant that the preparations in Allemann would be suitable as a parenteral composition if poly (dl-lactic) acid were also included and that the pharmaceutical compositions of the present invention do not necessarily require the use of poly (dl-lactic acid), thus, distinguishing them is rather confusing since just as in instant composition, Allemann's composition also lacks this compound. Applicant's arguments that assuming arguendo that Allemann discloses an active agent, nowhere in Allemann is a poorly water-soluble active agent disclosed. This argument is not persuasive since Allemann's compositions are for drug delivery, which implies any drug whether it is a water-soluble drug or water insoluble drug. Applicant points out Morella in support, which according to applicant discloses a highly water-soluble active in a sustained release formulation. This argument is not persuasive since the rejection is made on Allemann's reference and not on Morella's reference.

Applicant argues that Kawata teaches a four component sustained release composition that contains a medical material, polyethylene oxide, a 1st component and a 2nd component and this composition exists as a fine powder with no aqueous

formulation base. Furthermore according to applicant, there is no suggestion or motivation to combine Allemann with Kawata since the former is a nanosuspension dispersed in an aqueous formulation base whereas the latter concerns a solid pharmaceutical dosage form. These arguments are not persuasive. First of all, instant claim language 'comprising' does not exclude the other components taught by Kawata. Secondly, Kawata is combined for its teachings of enteric delivery of the water insoluble drugs and the principle of enteric delivery of a drug, that is, delivery to the intestines, will be the same whether the formulation is in a suspension form or a solid form.

The reference of Shaw (5,318,781) is cited of interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gollamudi S. Kishore, Ph.D whose telephone number is (571) 272-0598. The examiner can normally be reached on 6:30 AM- 4 PM, alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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L Skedur Gollamudi S Kishore, Ph.D

Primary Examiner

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GSK